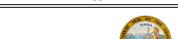
### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019147 Address: 333 Burma Road **Date Inspected:** 02-Jan-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Lv Li Qing No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A Weld Procedures Followed: N/A **Electrode to specification:** Yes No Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

BAY # 14

#### **ULTRASONIC TESTING**

ABF Report No: UT-13W-009R1

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a separate data sheet that Caltrans QA generates after performing a joint inspection with ABF ultrasonic testing personnel. The location of the inspection was identified as the deck panel splices of OBG segment 13 west. The weld designations were as follows:

DP3143-001-137; DP3144-001-227; DP3145-001-301; DP3146-001-009; DP3147-001-301

During the Ultrasonic testing of the weld DP3146-001-009 this QA Inspector discovered rejectable indications in the HAZ area. This QA Inspector performed visual inspection from other side of the weld during the visual inspection observed 7 linear indications, for the conformation of the indication this QA Inspector performed

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

magnetic particle testing on this area. See attached photos of magnetic particle inspection those showing the linear indication. This QA Inspector informed to QA lead about this issue. As per lead QA ZPMC will repair this area and ABF will re-notified this weld for Ultrasonic testing.

This QA Inspector randomly observed the following work in progress.

#### **OBG 14 EAST**

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 048047 performing the Shielded Metal Arc Welding process on weld 169 located at PCMK SEG3019BB. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2212-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 201087 performing the Shielded Metal Arc Welding process on weld 191 located at PCMK SEG3019BB. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2212-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067656 performing the Shielded Metal Arc Welding process on weld 125 located at PCMK SEG3019BB. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2212-Tc-u4b-Fcm-1.

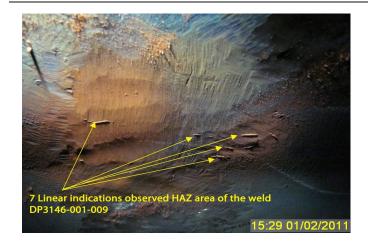
This Quality Assurance (QA) Inspector observed ZPMC qualified welder 070432 performing the Shielded Metal Arc Welding process on weld 037 located at PCMK SEG3019BB. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2212-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066422 performing the Shielded Metal Arc Welding process on weld 147 located at PCMK SEG3019BB. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2212-Tc-u4b-Fcm-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)





# **Summary of Conversations:**

No significant conversations were reported on this date.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer